



Iowa Office of Energy Independence and the Iowa Power Fund: Taking Shape

Roya Stanley – Director

**Economic Development
Appropriations Subcommittee
January 30, 2008**

Office of Energy Independence



The Office of Energy Independence (OEI) was established in 2007 to coordinate the state of Iowa's activities concerning energy independence.

VISION: Iowans creating an economically viable and environmentally sound energy future.

MISSION: To achieve a sustainable energy future by:

- Providing leadership through education, planning and investment
- Developing policies and resources to produce market transformation

OEI Off and Running



Initial Tasks:

- Iowa Power Fund
- Energy Independence Plan

Iowa Power Fund – Open for Business



January 11, 2008

Iowa Power Fund



- \$100 million over 4 years
- Provides financial assistance to entities to increase Iowa's research, development, & use of sources of renewable energy; improve efficiency and reduce greenhouse gas emissions.
- Includes \$2.5 million – DED community college workforce training & economic development

Eligibility criteria for financial assistance



- Commercialization/product development
- Utilization of Iowa crops/products that maximize value of crops used as feed stock in bio-manufacturing products and as co-products
- Reduction of GHG, carbon sequestration
- Private or federal matching funds

Iowa Power Fund Board



- Comprised of 18 members, 11 voting and 7 nonvoting, ex officio members:
 - Fred Hubbell, public; MJ Dolan, Iowa Association of Community Colleges Trustees; Gregory Geoffroy, Iowa State University; Peter Hemken, DuPont Company; Kent Henning, Grand View College; Patricia Higby, Center for Energy and Environmental Education; Senator Hubert Houser; Carrie LaSeur, Plains Justice; Richard Leopold, Director of Department of Natural Resources; John Norris, Director Iowa Utilities Board; Bill Northey, Iowa Department of Agriculture and Land Stewardship;

Iowa Power Fund Board



Glen Cannon, Waverly Light and Power;
Lucy North, Iowa Renewable Fuels
Association; Representative Nathan
Reichert; Representative Chuck
Soderberg; Senator Roger Stewart;
Michael Tramontina, Director Iowa
Department of Economic Development;
Thomas Wind, Wind Utility Consulting.

Iowa Power Fund Board



- Review and approve applications for assistance from the fund; direct moneys for technical assistance for the Diligence Committee
- Advise OEI on strategic direction for the Power Fund
- Resource to the Governor regarding renewable energy, renewable fuels & energy efficiency
- Designing the Power Fund Process

Iowa Power Fund Board



Since September 26, 2007:

- has met 7 times,
- has developed and finalized rules for the Iowa Power Fund,
- has approved the Iowa Energy Independence Plan, and
- is ready to receive applications.

Due Diligence Committee



- Comprised of 7 members: Floyd Barwig, Iowa Energy Center; Franklin Codel, Wells Fargo Home Mortgage; Ted Crosbie, Monsanto; Vern Gebhart, Alliant Energy; Patricia Higby, Center for Energy and Environmental Education; Fred Hubbell, public and Roya Stanley, Office of Energy Independence.
- Reviews applications for financial assistance that come before the Power Fund Board

Due Diligence Committee



- Determines if a proposed project is practical, economically feasible
- May recommend to the Board approval on conditional basis or that an application be rejected

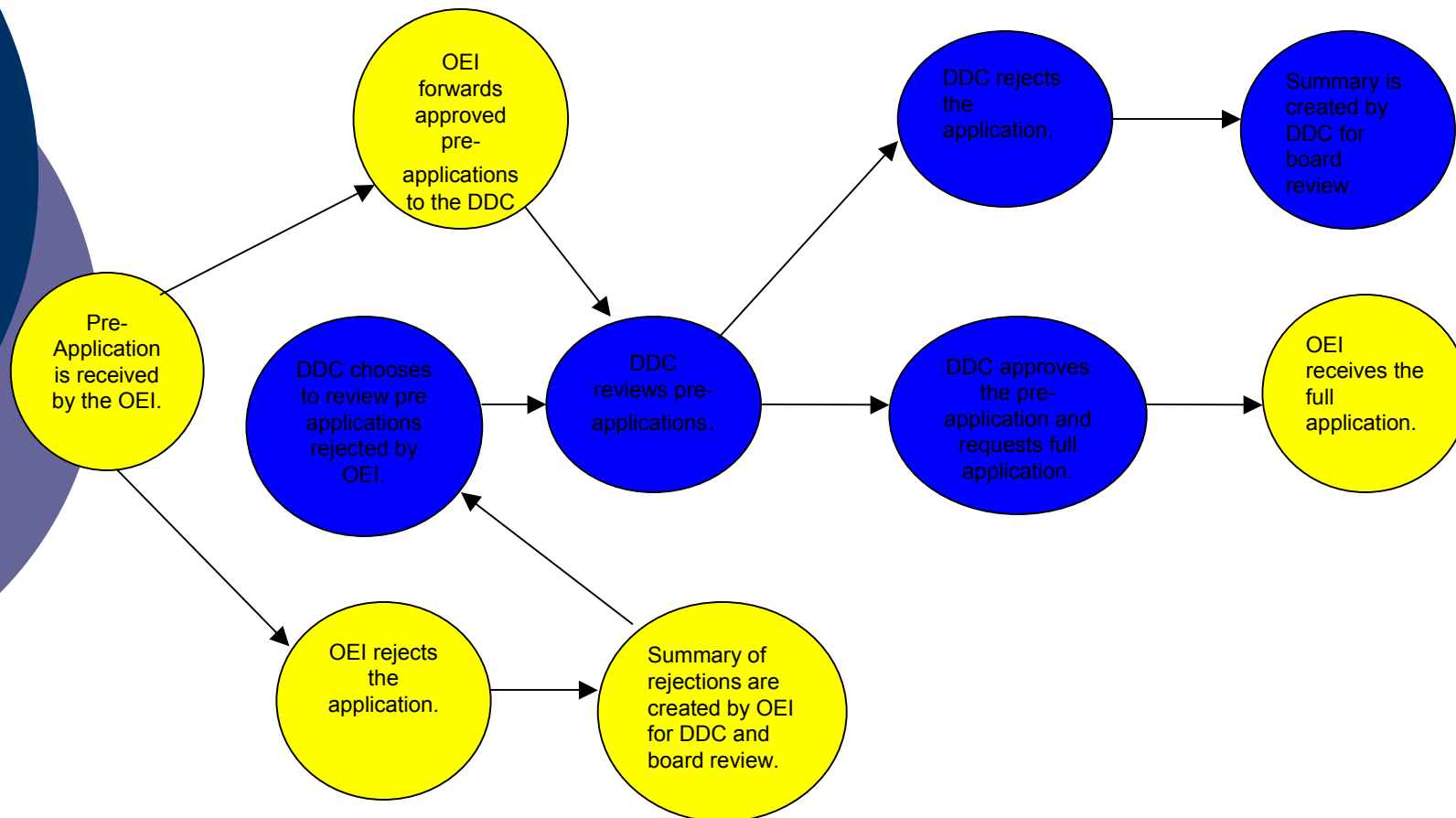
Application Process



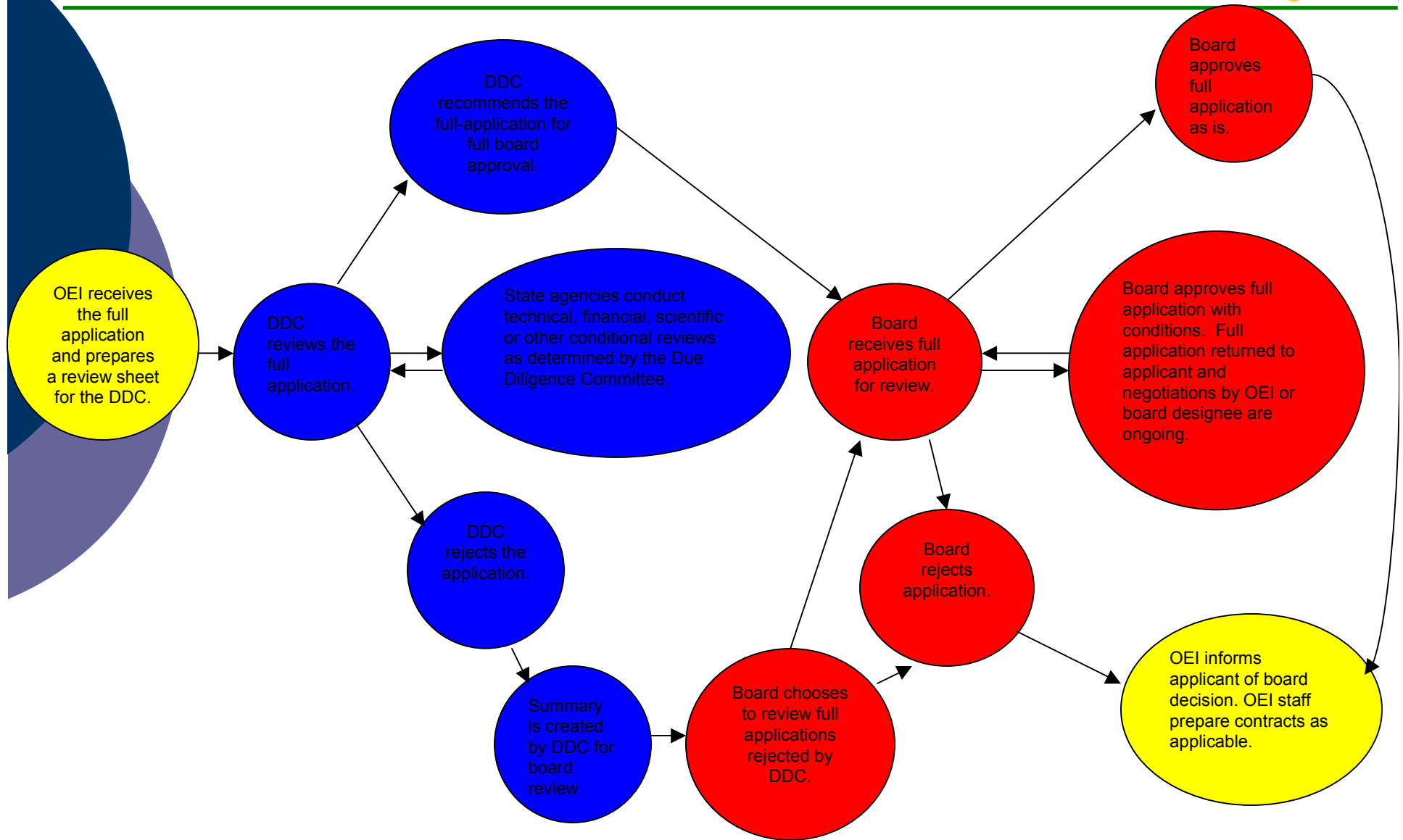
- Pre-application
- Full-application
- Website:

www.energy.iowa.gov

Power Fund Pre-Application Flow Chart



Power Fund Full-Application Flow Chart



Plan



Iowa Plan for Energy Independence

Charting Iowa's Course in the New Energy Economy

December 2007

Submitted by the Iowa Office of Energy Independence

Iowa Energy Independence Plan



- Submitted December 14, 2007
- Goal: A plan to achieve energy independence by 2025
- “Roadmap” in 2007; more comprehensive plan in 2008

Independence Plan

- Input received from the public at four public forums:
 - Oct 18 - Iowa Historical Building in Des Moines
 - Oct 22 - Community Center in Coralville
 - Oct 25 - Iowa Western Community College in Council Bluffs
 - Oct 29 - Iowa Central Community College in Fort Dodge

Iowa Energy Independence Plan




- Approved, as required by statute, by the Iowa Power Fund Board
- Includes policy recommendations that will be further developed

State Energy Council



- Membership consists of staff from various Iowa Departments & Organizations
- Input into Energy plan & review plan's compliance
- Sharing of energy information & rule making activities
- Provide technical expertise & assist w/ outreach
- Evaluate legislation
- Develop long term recommendations
- Keep OEI in the loop (monthly reports)
- Synergies

State of Iowa's energy future



Change =
Risk and Opportunity

There is no status quo

Contacts



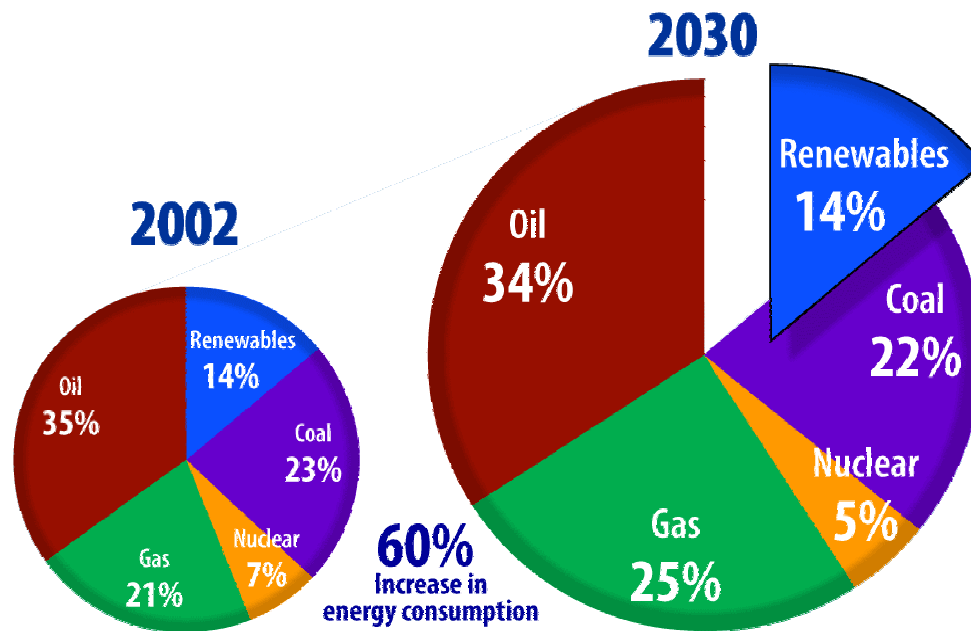
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Energy Independence
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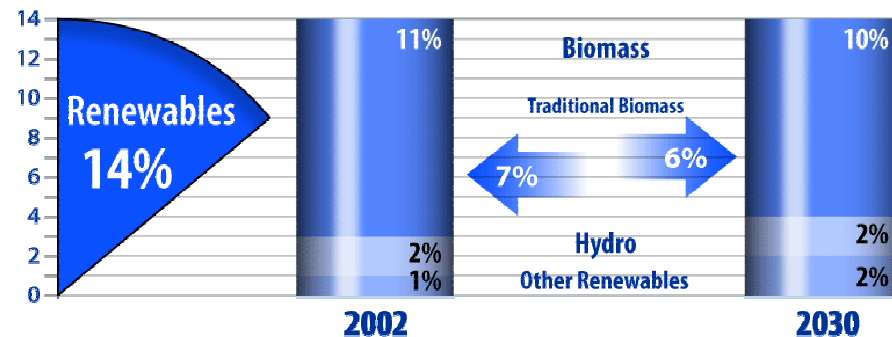
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World Energy Supply & the Role of Renewable Energy

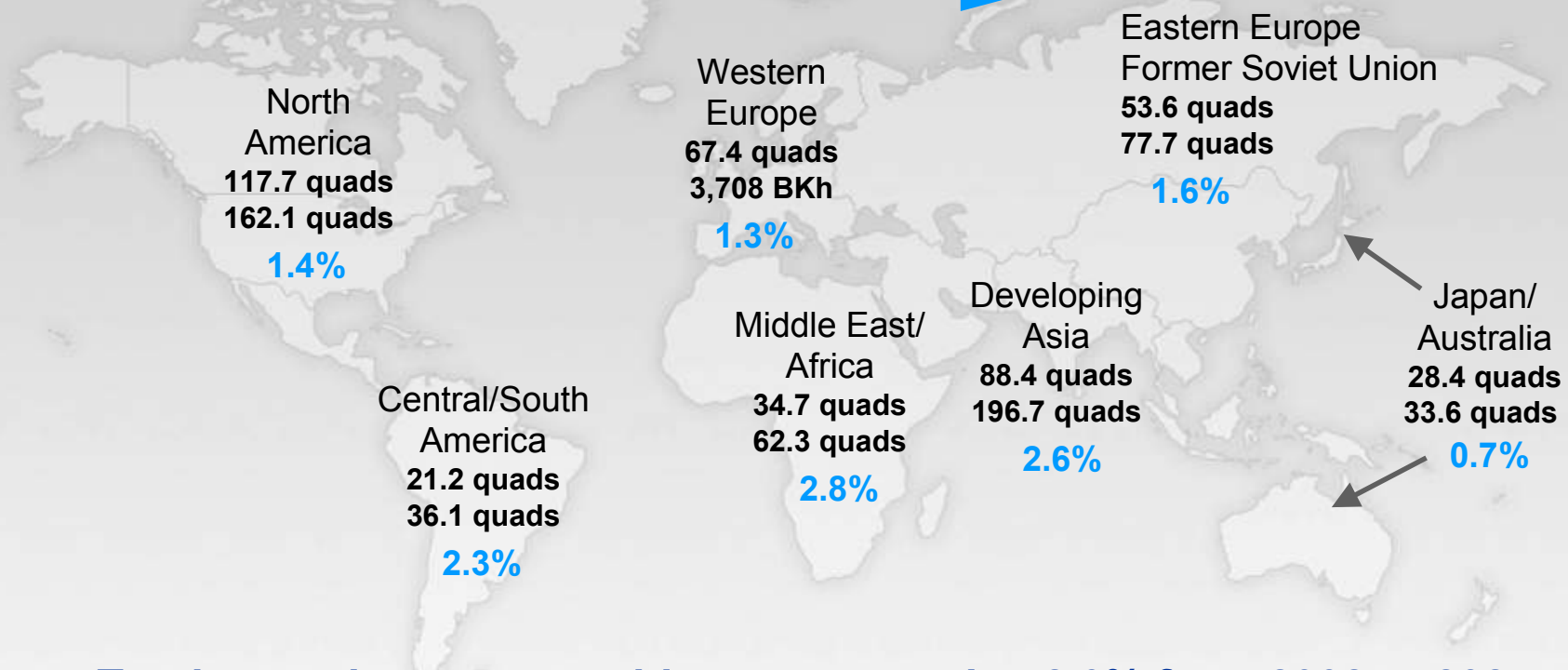


Source: OECD/IEA, 2004



Global Energy Demand 2002-2025

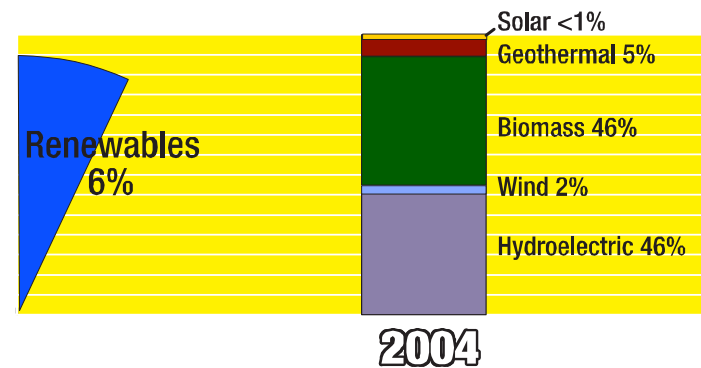
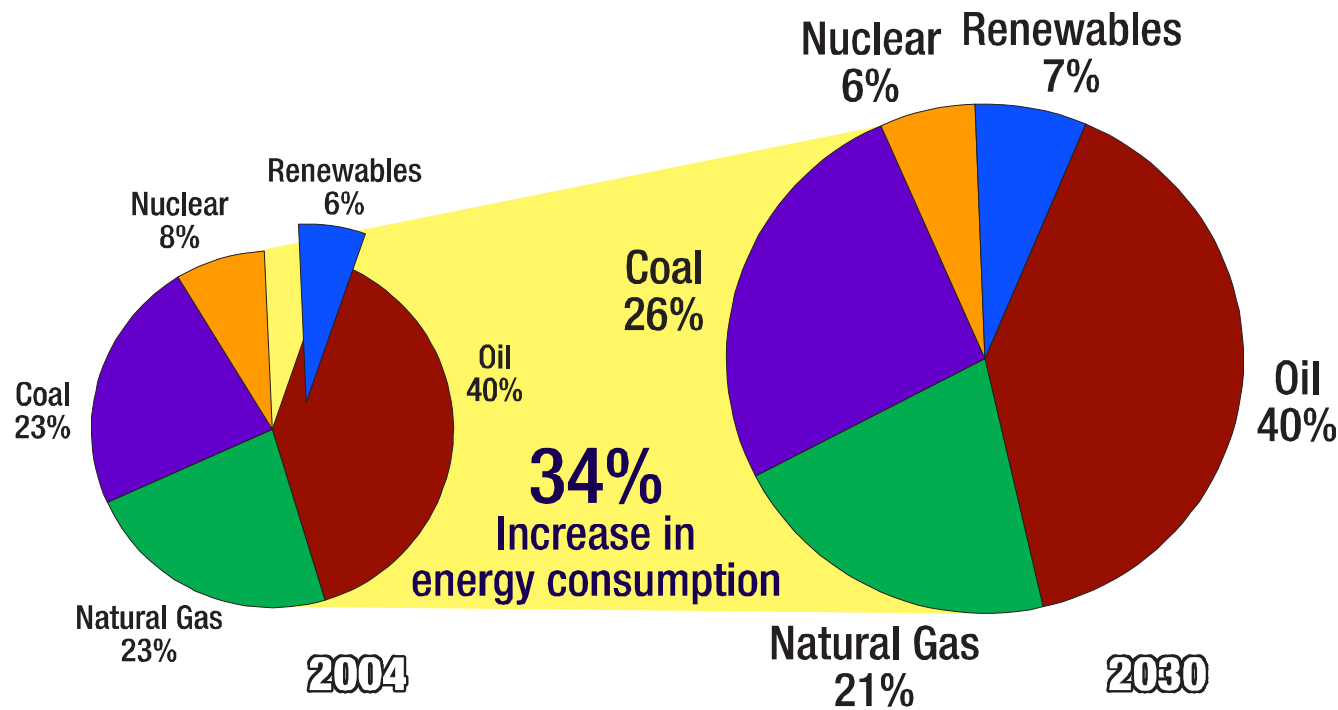
57% increase



- **Total annual average world energy growth – 2.0% from 2002 to 2025**
- **Growth rates in transitioning economies higher than developed economies**
- **Natural gas and coal will be near-term fuels of choice for generation**
- **Distributed generation and renewable energy will offer attractive options**

Source: International Energy Outlook 2005, Table A1

U.S. Energy Consumption by Source



Source: Energy Information Administration,
Annual Energy Outlook 2006, Table D4

State of the State in Energy



- Iowa continues to rely heavily on imported energy
 - more than 95% of primary energy sources come from out of state.
- 38% of Iowa's total energy use is being consumed by the electric power sector.
 - Between 2000-2004, coal use slightly declined and Iowa had an increase in use of ethanol and wind energy
- Iowa's energy expenses for principal sources in 2007 was over \$11 billion

State of the State in Energy



- Biomass decline between 1996-2001, slight increase in 2002.
- Hydroelectric capacity is relatively stable.
- Leading producer of ethanol & biodiesel
 - Ethanol: 29 refineries; 2 billion gallons current capacity; 1.36 billion gallons under construction
 - Biodiesel: 14 refineries; 317 million gallons current capacity; 34 million gallons under construction
- Ranked 4th in wind energy capacity

State of the State in Energy



Proportions of Energy Resources Used - 2004

Fuel	Iowa	United States
Coal	36.8%	22.5%
Petroleum	36.1%	40.2%
Natural Gas	18.8%	22.9%
Nuclear	4.2%	8.2%
Renewable Energy*	4.5%	6.2%

*Renewable Energy includes hydro, geothermal, solar, wind & biomass

State of the State in Energy



Changes in Iowa Energy Usage by Economic Sector

Sector	1980	1990	2000	2004
Residential	23.9%	22.2%	20.1%	19.1%
Commercial	12.5%	14.6%	14.7%	15.1%
Industrial*	39.9%	38.8%	42.2%	41.1%
Transportation	23.6%	24.4%	23.0%	21.6%

*Industrial sector includes agricultural activities